

New Structures and Equipment by Using Industries, 1972

THIS article presents the capital flow table (CFT) for 1972.¹ It shows the using industries for each type of new structures and equipment contained in the column for gross private domestic fixed investment (GPDI) in the 1972 input-output (I-O) table.²

The relationship between the CFT and the I-O use table is illustrated in chart 10. In the use table, the rows show the commodities—the raw materials, semifinished goods, and services—consumed by the industry named at the head of the column. Transactions involving structures and equipment of types normally depreciated over more than one year are recorded as sales to final demand: persons, investors, foreigners, or government. As the chart indicates, the capital flow table disaggregates the purchases by investors to show the flows of capital goods to using industries.

The CFT indicates the using industry only for new structures and equipment; it does not provide detail for net purchases of scrap, used, and secondhand goods, nor for real estate commissions on the sale of used structures.

Capital flow information can be used in several ways. First, a CFT can be used to obtain information on the markets for capital goods. Conventional I-O tables provide marketing information only for current-account transactions. Second, a CFT, in conjunction with conventional I-O tables, can be used to measure the amount of each indus-

try's total output that is required for a specified level of investment by a given industry. The information on the type of capital goods bought or leased by a given industry that is contained in a CFT is used to translate a specified level of total investment by the given industry into the detailed direct requirements on the construction and equipment industries. These direct requirements, which constitute a "bill of goods," are then applied against a total requirements table to measure the effect of the specified investment on each industry of the Nation.³ A third way in which capital flow information can be used is not directly related to I-O. It involves using a series of CFT's to help estimate capital stocks in the industry detail of these tables.

Layout of tables

In table 1, the using industries, of which there are 76, are shown for two classifications of new equipment and structures: for 43 I-O commodity groups and for 41 capital goods categories.⁴ The capital goods categories are those shown in the national income and product accounts (NIPA's) with a few aggregations (tables 5.4 and 5.6 in the July 1979 and earlier July issues of the *SURVEY OF CURRENT BUSINESS*). Table 2 presents the same information as table 1, but is aggregated into broad industry groups. This table is useful for

those who wish to evaluate capital flows at more aggregative levels.

CFT's can be in either producers' or purchasers' prices. The two valuations differ by the inclusion in the latter of the transportation costs and trade margins involved in getting the commodity from the producing to the using industry. The transportation costs and trade margins appear in table 1 as the sum of all such costs and margins involved in selling or leasing capital goods to users. The trade margin total is the sum of all the wholesale and retail margins paid for delivery to users of producers' durable goods and of mobile homes. (There are only a few retail margins.) The transportation costs for the delivery to users of the same items also appear as an aggregate in table 1. The tabulation by I-O commodity group is in producers' values, so that it is consistent with the 1972 I-O table's presentation, and the tabulation by capital goods category is in purchasers' values, so that it is consistent with the NIPA

(Text continued on page 58)

THE computer tape (accession number BEA IED 80-001) for the detailed capital flow table can be purchased from the Interindustry Economics Division (BE-51), Bureau of Economic Analysis, U.S. Department of Commerce, for \$200.00. The tape provides the estimates by using industry for all 606 commodities: producers' value, various margins, and the purchasers' value. The classification of the procedures used to estimate each cell is provided together with the I-O commodity, SIC product, and NIPA capital goods codes. The tape also indicates whether the amount in each cell was imported or produced domestically.

1. CFT's for 1969 and 1967 were presented in articles in the August 1971 and September 1973 issues of the *SURVEY OF CURRENT BUSINESS*.

2. Philip M. Hira, Eugene F. Roberts, and Paula C. Young, "Dollar-Value Tables for the 1972 Input-Output Study," *SURVEY*, April 1974.

*Acknowledgments to appear in August *SURVEY*.

3. A total requirements table is derived from a conventional I-O table and shows the output required (directly and indirectly) from each industry for a given delivery of 36 of commodity output to final demand. A bill of goods is a breakdown of the purchases by final demand, or by a component of final demand, from the commodities in the conventional I-O table. An example of a total requirements table and a further discussion of the preparation of a bill of goods appear in the February 1979 *SURVEY*.

4. Table 1 shows entries for industries 1 through 77, but because industries 11 and 12 (construction) are combined, there are only 76 using industries.

Table 1.—Distribution of New Structures and

[Millions]

Line	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.) For the composition of capital used by an industry, read the column for that industry. (Industry number in parentheses.)	Livestock and livestock products	Other agricultural products	Forestry and fishery products	Agriculture, forestry, and fishery services	Iron and ferroalloy ores mining	Nonferrous metal ores mining	Coal mining	Crude petroleum and natural gas	Stone and clay mining and quarrying	Chemical and fertilizer mineral mining	Construction	Ordinance and accessories
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11 & 12)	(13)
	Capital flow table by I-O commodity group (Producer's value)												
1	(5) Nonferrous metal ores mining (uranium ore).....												
2	(8) Crude petroleum and natural gas.....												
3	(11) New construction.....	408.0	820.3	47.8	53.0	18.0	204.8	212.8	73.4	108.0	22.3	373.6	40.3
4	(12) Ordinance and accessories.....												
5	(17) Miscellaneous textile goods and floor coverings.....												
6	(20) Lumber and wood products, except containers.....												
7	(22) Household furniture.....												
8	(23) Other furniture and fixtures.....		1.0	.1	2.4		.1	.4		1.3	.1	68.8	5.8
9	(27) Chemicals and selected chemical products.....												
10	(32) Rubber and miscellaneous plastic products.....												
11	(27) Primary iron and steel manufacturing.....												
12	(28) Primary nonferrous metals manufacturing.....												
13	(29) Metal containers.....												
14	(30) Heating, plumbing and fabricated metal products.....	1.6	54.4			3.8	8.6	1.2	10.4	3.8	3.3		.1
15	(42) Other fabricated metal products.....								4.3			18.0	.1
16	(43) Engines and turbines.....	.2	5.3	20.2	2.2	2.7	2.3	.8	29.4	8.4	1.2	24.8	1.0
17	(44) Farm and garden machinery.....	247.0	3,042.8	1.0	202.2	15.4	101.9	.8	218.2	142.9	38.4	2,785.5	.5
18	(45) Construction and mining machinery.....		4.0	.7	1.7							15.2	.2
19	(46) Materials handling machinery and equipment.....												
20	(47) Metalworking machinery and equipment.....	18.2	18.0		4	.3	1.0	2.8		1.3	.3	153.1	20.9
21	(48) Special industry machinery and equipment.....	.7	33.3	7.3	17.3			1.3		.1		7.1	4.2
22	(49) General industrial machinery and equipment.....	2.4	114.3	7.2	.7	.6	6.5	18.0	40.6	6.6	1.5	87.4	3.9
23	(50) Miscellaneous machinery, except electrical.....												
24	(51) Office, computing and accounting machines.....	.1	8.3	6.1	6.6		6.2	.4	51.3	5.5	.6	28.7	2.3
25	(52) Service industry machines.....	.3	14.4	.3	.5		.1	.1	2.2	.2		28.3	3.9
26	(53) Electric transmission & distribution equipment.....	.2	8.6	.2	.2	5.3	7.1	12.2	44.3	6.7	4.3	54.6	22.7
27	(54) Household appliances.....												.2
28	(55) Electric lighting & wiring equipment.....												.2
29	(56) Radio, TV & communication equipment.....			.3	.3	.1	.4	.1	.1	.7	.1	1.6	11.8
30	(57) Electronic components & accessories.....												
31	(58) Misc. electrical machinery, equipment & supplies.....												
32	(59) Motor vehicles and equipment.....	487.0	418.5	20.3	58.4	3.3	13.6	54.5	115.4	61.3	11.2	1,674.5	7.7
33	(60) Aircraft and parts.....		1.3	2.3	66.0	.3	.3	1.0	3.6	.4	.1	41.7	.6
34	(61) Other transportation equipment.....	.1	6.1	12.1	7.3	.3	1.3	4.7	35.0	6.0	1.3	23.9	.1
35	(62) Professional, scientific, controlling instruments.....		1.4	2.4	7.3	.7	3.1	.9	2.8	3.7	.4	77.1	1.8
36	(63) Optical, photographic & photographic equipment.....	.1	5.4	.7	8.7	.8	3.6	1.5	9.8	3.0	.6	51.0	8.0
37	(64) Miscellaneous manufacturing.....												
38	(65) Transportation and warehousing.....	20.3	104.1	1.4	4.9	.5	3.6	13.9	8.6	8.8	1.3	82.4	.2
39	(66) Communications, except radio and TV.....												
40	(67) Wholesale and retail trade.....	128.3	496.8	12.9	62.2	3.1	16.1	54.5	64.7	29.9	6.6	884.0	7.7
41	(71) Real estate and rental.....												
42	(72) Hotels, lodging, personal and repair services.....	.1	2.5		.1							3.8	.6
43	(80) Noncomparable imports.....		2.4										
44	Total.....	1,496.4	8,168.3	184.7	488.4	186.9	272.3	732.9	3,598.6	384.2	84.5	6,537.4	144.6
	Capital flow table by capital goods category (Purchaser's value)												
45	New industrial buildings.....					28.9	32.0	15.7	52.3	42.3	10.7		28.4
46	New commercial buildings and mobile offices.....	.1	2.7		25.7	3.9	8.9	35.8	52.2	6.4	1.0	384.9	11.3
47	New religious buildings.....												
48	New educational buildings.....												
49	Hospitals and institutions.....												
50	Other buildings.....				6.1								
51	New railroads, telecommunications & electric utility facilities.....												
52	New gas utility facilities.....												
53	New petroleum pipelines.....												
54	New farm structures (nonresidential).....	908.0	938.9		8.7								
55	Mining exploration, shafts and wells.....					50.7	154.4	98.8	2,658.8	63.1	30.1		
56	Other new nonresidential structures.....					6.7	8.9	45.5	105.2	3.1	1.0		
57	Brokers' commissions on sales of nonresidential structures.....			47.0	11.6								
58	New residential nonfarm housing and mobile homes.....												
59	New hotels and motels.....												
60	New dormitories.....												
61	New farm housing units.....												
62	Brokers' commissions on sales of residential structures.....												
63	Total new structures.....	908.1	934.9	47.0	67.9	97.2	262.9	216.6	3,902.3	111.9	22.8	384.9	40.3
64	Furniture & fixtures.....		1.9	.1	2.4		.1	.4		1.3	.1	161.6	6.1
65	Fabricated metal products.....	1.7	6.07		2.4	5.2	4.7	1.2	15.9	3.7	2.4	21.4	.3
66	Engines & turbines.....	.2	5.9	22.2	2.2	2.8	2.3	.9	26.8	3.5	1.3	27.3	1.0
67	Tractors.....	27.2	1,242.5	1.1	123.8	.9	8.2			6.8	1.9	578.4	.9
68	Agricultural machinery, except tractors.....	287.3	2,181.4		48.2								
69	Construction machinery, except tractors.....		2.4	.2	.8	1.0	28.9	149.8	36.8	68.5	20.2	2,882.7	.2
70	Mining and oilfield machinery.....					11.0	70.2	237.4	306.7	89.8	20.0	174.0	23.3
71	Metalworking machinery.....	24.9	24.5		.4	.3	1.9	8.3		1.8	.8	174.0	4.3
72	Special industry machinery, n.e.c.....	.8	37.5	8.3	15.0			1.4				7.0	4.2
73	General industrial, including materials handling, equipment.....	2.7	182.4	8.2	.8	1.1	6.2	28.4	27.1	4.6	2.7	129.7	2.8
74	Office, computing and accounting machinery.....	.1	8.0	6.0	6.2		6.7	.4	54.8	6.6	.7	36.6	6.1
75	Service industry machinery.....	.4	18.5	.3	.6	.4	.1	.1	2.3	.8		36.9	23.6
76	Electrical transmission and distribution equipment.....	.3	10.9	.2	.2	5.4	7.4	13.9	47.8	5.9	4.4	46.4	12.1
77	Communication equipment.....			.3	.3	.1	.4		.5	.7	.1	1.6	1.6
78	Electrical equipment, n.e.c.....												
79	Trucks, buses, truck trailers.....	352.1	318.9	8.5	42.4	1.6	7.8	29.7	68.1	45.5	8.2	1,688.1	1.1
80	Passenger cars.....	318.3	138.3	18.3	69.1	2.3	6.8	38.4	73.8	25.9	8.0	423.8	8.3
81	Aircraft.....		1.6	4.5	49.4	.1	.3	1.2	4.4	1.1	.2	30.7	1.0
82	Ships & boats.....			55.5	.3			.9	29.0	4.0	.8	45.6	
83	Railroad equipment.....												
84	Instruments.....	.1	7.7	1.2	6.3	1.7	7.6	2.6	64.0	4.7	.8	136.9	8.7
85	Other.....	1.0	94.8	1.1	75.4			.1		.8		26.7	.7
86	Residential (handheld) machines.....												
87	Total new equipment.....	937.9	4,324.9	184.7	435.4	29.7	189.6	622.4	689.3	282.3	71.7	6,182.5	194.2

Equipment to Using Industries, 1972

of dollars]

Food and kindred products (14)	Tobacco manufactures (15)	Bread and narrow fabric, yarn and thread mills (16)	Miscellaneous textile goods and floor coverings (17)	Apparel (18)	Miscellaneous fabricated textile products (19)	Lumber and wood products, except containers (20)	Wood containers (21)	Household furniture (22)	Other furniture and fixtures (23)	Paper and allied products except containers (24)	Paperboard containers and boxes (25)	Printing and publishing (26)	Chemicals and allied chemical products (27)	Plastics and synthetic materials (28)	Drugs, cleaning and toilet preparations (29)	Paint and allied products (30)	Petroleum refining and related industries (31)	Rubber and miscellaneous plastics products (32)	Leather tanning and finishing (33)	Total (34)
692.7	64.0	142.1	42.7	135.4	31.6	202.0	2.7	60.0	39.3	177.3	42.2	266.6	262.4	121.9	160.5	26.2	654.1	243.2	3.8	1
2.2																				2
2.4																				3
84.0	1.0	7.1	2.3	18.8	4.3	10.8	.6	4.8	3.3	18.4	10.1	26.5	2.7	3.6	8.0	1.3	3.0	16.7	.3	4
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Table L.—Distribution of New Structures and

(Millions)

Lines	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.) For the composition of capital used by an industry, read the column for that industry. (Industry number in parentheses.)	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.)	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.)	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.)	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.)	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.)	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.)	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.)	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.)	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.)	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.)	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.)	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.)
		(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)
1	Capital flow table by 1-0 commodity group (Producer's value)												
2	(0) Nonferrous metal ore mining (uranium ore)												
3	(1) Crude petroleum & natural gas												
4	(11) New construction	16.7	55.4	174.6	274.8	176.7	14.3	117.7	45.9	94.5	42.7	48.5	47.0
5	(12) Ordnance & accessories												
6	(13) Miscellaneous textile goods & floor coverings												
7	(14) Lumber & wood products, except containers												
8	(15) Household furniture												
9	(16) Other furniture & fixtures	4.9	8.7	14.0	15.0	9.3	8.5	7.3	7.4	11.2	6.1	4.8	4.5
10	(17) Chemicals & selected chemical products												
11	(18) Rubber & miscellaneous plastics products												
12	(19) Primary iron & steel manufacturing												
13	(20) Primary nonferrous metal manufacturing												
14	(21) Metal containers												
15	(22) Heating, plumbing & fabricated metal products												
16	(23) Other fabricated metal products												
17	(24) Engines & turbines												
18	(25) Farm & garden machinery												
19	(26) Construction & mining machinery												
20	(27) Materials handling machinery & equipment	9.0	8.6	16.7	32.5	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
21	(28) Metalworking machinery & equipment	7.7	22.5	102.1	298.3	124.3	44.8	65.6	122.1	122.1	122.1	122.1	122.1
22	(29) Special industry machinery & equipment	2.6	22.5	102.1	298.3	124.3	44.8	65.6	122.1	122.1	122.1	122.1	122.1
23	(30) General industrial machinery & equipment	1.2	22.1	65.8	234.4	49.4	26.2	12.9	17.5	25.0	14.4	8.7	13.8
24	(31) Miscellaneous machinery, except electrical												
25	(32) Office, computing & accounting machines	8.1	22.7	24.4	59.3	27.1	6.2	14.5	14.3	20.8	22.8	18.2	25.2
26	(33) Service industry machines	9.9	7.4	5.3	14.4	8.2	2.3	4.1	2.0	6.6	3.4	1.5	2.9
27	(34) Electric transmission & distribution equipment	1.1	24.4	45.0	194.5	122.7	2.1	26.5	19.3	20.9	14.4	19.5	19.2
28	(35) Household appliances	4.0											
29	(36) Electric lighting & wiring equipment												
30	(37) Radio, TV & communication equipment		4.0	7.8	4.4	1.4	.9	1.1					
31	(38) Electronic components & accessories												
32	(39) Miscellaneous electrical machinery, equipment and supplies												
33	(40) Motor vehicles and equipment	12.1	28.5	122.1	62.5	23.3	21.4	42.9	41.4	54.3	41.4	11.0	14.8
34	(41) Aircraft and parts												
35	(42) Other transportation equipment	1.8	1.8	2.7	2.8	1.3	.2	1.2	1.2	.4	.3	.5	1.3
36	(43) Professional, scientific, controlling instruments		28.2	35.9	10.8	5.3	1.1	2.6	1.5	2.4	1.3	1.0	2.1
37	(44) Optical, ophthalmic and photographic equipment	2.5	7.9	15.7	22.0	12.4	2.7	8.4	4.9	6.0	5.1	3.0	5.4
38	(45) Miscellaneous manufacturing												
39	(46) Transportation and warehousing	1.8	1.9	7.0	12.4	7.8	1.8	2.2	8.1	2.4	2.9	1.4	1.7
40	(47) Communications, except radio and TV												
41	(48) Wholesale and retail trade	8.0	21.6	48.7	108.6	57.4	11.5	20.2	25.3	34.7	12.4	12.5	16.1
42	(49) Real estate and rental												
43	(50) Hotels, lodging, personal and repair services												
44	(51) Nonmerchandise exports												
45	Total	72.3	336.6	922.0	1,482.1	844.1	162.8	418.4	227.3	364.4	265.9	195.5	244.3
46	Capital flow table by capital goods category (Purchaser's value)												
47	New industrial buildings	10.0	41.7	122.2	280.6	151.3	18.8	96.6	35.0	75.3	39.0	25.8	35.0
48	New commercial buildings and mobile offices	6.7	11.9	41.4	44.2	25.4	3.8	29.1	10.8	21.2	8.8	12.8	12.0
49	New religious buildings												
50	New educational buildings												
51	Hospitals and institutions												
52	Other buildings												
53	New railroads, telecommunications and electric utility facilities												
54	New gas utilities facilities												
55	New petroleum pipelines												
56	New farm structures (nonresidential)												
57	Mining exploration, shafts and wells												
58	Other new nonresidential structures												
59	Brokers' commissions on sales of nonresidential structures												
60	New residential nonfarm housing and mobile homes												
61	New hotels and motels												
62	New dormitories												
63	New farm housing units												
64	Brokers' commissions on sales of residential structures												
65	Total new structures	36.7	125.5	376.6	274.8	176.7	14.3	117.7	45.9	94.5	42.7	48.5	47.0
66	Furniture and fixtures	4.5	7.5	15.5	17.6	10.4	3.5	5.1	5.2	12.6	6.0	5.8	7.0
67	Fabricated metal products	.1	1.9	31.2	160.2	60.7	.1	2.0	1.7	2.6	2.0	6.8	5.0
68	Engines and turbines		1.1	7.5	22.5	19.9	.8	.7	.8	.7	1.2	1.1	.4
69	Tractors		.2	11.7	1.0	.6			.1	.3	.5	.2	.4
70	Agricultural machinery, except tractors												
71	Construction machinery, except tractors		.4	21.8	16.4	2.7	.2	1.5	.5	.5	.5	.5	1.8
72	Mining and oilfield machinery												
73	Metalworking machinery	2.7	33.7	106.6	223.6	162.1	49.5	103.1	121.9	143.6	72.3	58.4	68.9
74	Special industry machinery, n.e.c.	2.7	16.9	194.4	60.1	32.6	2.3	19.2	16.8	28.4	2.3	2.3	2.3
75	General industrial (including materials handling, equipment)	11.8	34.9	91.5	291.3	75.6	41.9	24.5	33.9	47.5	38.9	30.0	45.3
76	Office, computing and accounting machinery	10.0	25.4	28.6	68.2	30.3	6.6	36.7	30.0	35.1	32.0	20.2	28.1
77	Service industry machinery	1.1	8.5	7.4	19.0	11.3	2.7	5.4	2.7	7.2	4.4	1.9	3.9
78	Electrical transmission and distribution equipment	1.1	25.2	48.8	212.3	108.2	8.9	30.5	17.3	23.9	15.0	12.7	22.4
79	Communication equipment		4.1	8.0	6.6	1.4	.3	1.1	1.4	2.3	2.1	1.0	2.2
80	Electrical equipment, n.e.c.	4.7			4.8	2.3	.5	1.1	1.6	2.3	2.1	2.6	2.4
81	Trucks, buses, truck trailers	1.1	7.6	97.7	29.7	15.4	14.4	37.0	22.0	35.0	9.8	10.8	15.1
82	Passenger cars	15.1	22.0	74.4	34.3	24.1	12.1	37.5	28.0	48.6	9.8	.6	1.3
83	Aircraft		1.7	3.8	3.9	1.5	.3	1.2	1.4	1.0	2.0	.6	1.5
84	Ships and boats												
85	Railroad equipment												
86	Instruments	2.5	34.1	48.7	49.2	24.5	4.3	10.1	7.2	12.7	6.5	4.6	8.0
87	Other	.5	.9	3.1	3.2	1.7	.4	1.2	1.0	1.9	.7	.6	.6
88	Residential (landlord dwellings)												
89	Total new equipment	56.5	274.9	892.4	1,217.3	677.4	146.2	364.2	291.4	383.9	187.1	149.3	217.3

Table 1.—Distribution of New Structures and Equipment to Using Industries, 1972—Continued

(Millions of dollars)

Line	For the distribution of capital to using industries, read the row for that commodity (or category). (Commodity number in parentheses.) For the composition of capital used by an industry, read the column for that industry. (Industry number in parentheses.)	Commodities, except radio and TV (66)	Radio and TV (67)	Electric, gas, water and sanitary services (68)	Wholesale and retail trade (69)	Finance and insurance (70)	Real estate and rental (71)	Hotels, personal and repair services except auto (72)	Business services (73)	Eating and drinking places (74)	Automobile repair and services (75)	Amusements (76)	Medical, edu., services and nonprofit org. (77)	Totals
Capital flow table by 1-0 commodity group (Products' value)														
1	(6) Nonferrous metal ore mining (granular ore)			188.8										188.8
2	(8) Crude petroleum & natural gas													43.4
3	(11) New construction	3,270.9	48.3	8,528.7	5,328.0	529.1	558,858.8	2,700.2	481.8	745.7	744.1	523.6	5,672.6	99,838.5
4	(12) Ordnance & accessories	860.0												860.0
5	(17) Miscellaneous textile goods & floor coverings	1.8	.5	.8	25.8	4.4	358.8	100.8	6.8	71.9	1.1	7.1	41.4	605.7
6	(26) Lumber & wood products, except containers													4.8
7	(28) Household furniture													878.0
8	(29) Other furniture & fixtures	35.8	4.5	10.1	840.7	183.9	110.0	487.2	130.2	241.7	8.1	81.8	183.2	2,287.8
9	(37) Chemicals & selected chemical products			104.2			26.9	38.8						164.2
10	(38) Rubber & miscellaneous plastics products			1.0	6.1	.0	2.7	17.8	.7	2.4		1.3	8.6	44.2
11	(39) Primary iron & steel manufacturing			1.1										2.1
12	(42) Primary nonferrous metals manufacturing	64.0												64.0
13	(43) Metal containers													12.8
14	(44) Heating, plumbing & fabricated metal products			264.6	72.0					55.8			8.4	1,138.8
15	(45) Other fabricated metal products	.4		6.6	28.1	156.8		.8	.5		.1	.7	.6	712.2
16	(46) Engines & turbines			1,235.6			8.4							1,608.5
17	(47) Farm & garden machinery		.2	3.0	6.0	.6	452.8	26.8	12.8			10.8	84.6	4,201.7
18	(48) Construction & mining machinery			1.1	7.1				5.0					3,718.8
19	(49) Materials handling machinery & equipment			1.7	273.9									1,940.5
20	(50) Metalworking machinery & equipment	.4	1	4.7	34.3	4		10.4	5.0		33.6	1.8	2.0	2,078.4
21	(51) Special industry machinery & equipment	1.8	.2	1.0	2.7	3.1	.1	4.2	25.7	.2	6.4	.7	2.2	2,280.3
22	(52) General industrial machinery & equipment			253.5	10.9	.1	.4	8.3	17.7	8.9	38.1	4.7	10.0	2,788.7
23	(53) Miscellaneous machinery, except electrical													25.8
24	(61) Office, computing & accounting machines	131.8	5.2	125.6	408.8	882.6	24.2	31.2	833.9	28.2	12.6		105.1	4,222.2
25	(62) Service industry machines	7.4	1.7	20.1	774.3	35.0	34.1	177.3	92.1	377.1	11.0	9.5	111.7	2,077.6
26	(63) Electric transmission & distribution equipment	46.8	62.0	1,127.4	30.0	2.2		8.4	123.6		9.0	4.0	8.2	2,308.8
27	(64) Household appliances	.2		.3	0.8	.6	793.2	64.1	4.0	48.8	.1	.2	4.5	1,005.2
28	(65) Electric lighting & wiring equipment	1.1		17.8	24.0		.4	30.5	1.2				1.9	32.2
29	(66) Radio, TV & communication equipment	3,119.7	172.8	82.2	32.2	7.1	42.6	62.3	161.7	4.1	3.2	77.0	135.4	4,411.6
30	(67) Electronic components & accessories		5.0	.3	.3	1.0			5.1					14.4
31	(68) Misc. electrical machinery, equipment & supplies	27.3		0.2										418.0
32	(69) Motor vehicles & equipment	87.1	17.2	357.3	4,020.8	379.9	740.4	823.4	696.9	58.0	582.0	98.5	912.9	16,564.4
33	(70) Aircraft & parts	.0	.7	6.6	23.7	6.4	3.4	1.5	25.8	.6	.7	1.0	28.5	1,331.1
34	(71) Other transportation equipment			2.8	30.0	1.4	5,042.2	2.5	24.0		103.3	132.1	9.4	5,543.8
35	(72) Professional, scientific, controlling instruments	1.9	.1	368.5	10.3	8.7		1.3	38.3		.1	4.8	1,083.8	2,119.6
36	(73) Optical, ophthalmic & photographic equipment	23.7	14.3	24.4	243.4	243.1	40.0	88.6	302.6	28.0	5.8	28.6	265.1	2,074.5
37	(74) Miscellaneous manufacturing	6.4	10.1	15.6	28.1	24.5	15.0	58.4	9.8	70.8	1.4	228.3	134.7	784.7
38	(75) Transportation & warehousing	22.4	1.9	93.6	177.3	28.6	83.4	40.8	38.0	27.3	27.6	28.0	38.1	1,212.7
39	(76) Communications, except radio and TV	2,187.3												2,187.3
40	(77) Wholesale & retail trade	97.1	18.5	284.7	1,183.1	228.4	1,404.8	209.1	384.7	108.9	383.5	383.8	745.5	9,497.0
41	(78) Real estate & rental						407.0							887.2
42	(79) Hotels, lodging, personal & repair services	1.1	.2	2.3	78.4	5.8	.0	6.8	8.8	28.1	.5	.5	9.2	194.5
43	(80) Noncomparable imports													4.6
44	Total	6,170.1	362.2	12,348.3	13,791.5	3,876.1	64,559.5	6,067.9	2,418.6	1,970.3	2,387.5	1,533.4	2,348.0	185,923.4
Capital flow table by capital goods category (Purchasers' value)														
45	New industrial buildings							24.4						4,030.0
46	New commercial buildings and mobile offices	44.0	30.0	25.5	6,830.7	529.1	1,188.2	1,588.5	481.6	745.7	560.0	48.9	289.8	13,506.2
47	New religious buildings													344.8
48	New educational buildings													968.0
49	Hospitals and institutions													3,172.0
50	Other buildings		27.4									280.5		914.0
51	New railroads, telecommunications and electrical utility facilities	3,295.0		1,002.9										10,580.0
52	New gas utility facilities			1,015.8										1,815.0
53	New petroleum pipelines													284.0
54	New farm structures (nonresidential)													1,822.0
55	Mining exploration, shafts and wells													3,085.5
56	Other new nonresidential structures						284.1				94.1	94.1		941.0
57	Brokers' commissions on sales of nonresidential structures						30.0							18.8
58	New residential nonfarm housing and mobile homes						58,521.0							58,521.0
59	New hotels and motels							1,562.0						1,862.0
60	New dormitories							107.0						107.0
61	New farm housing units						576.0							576.0
62	Brokers' commissions on sales of residential structures						387.0							387.0
63	Total new structures	1,279.8	48.2	8,832.5	6,336.7	529.1	61,319.1	2,349.3	481.6	745.7	744.1	523.5	5,672.6	186,798.8
64	Furniture and fixtures	17.8	4.0	11.2	885.0	288.4	30.0	504.0	148.5	258.5	8.1	109.5	226.3	2,268.2
65	Fabricated metal products	.4		685.4	110.3	181.4	.1	1.0	.5	84.2	.2	.8	4.0	2,528.9
66	Engines and turbines			1,297.5			8.2							1,686.3
67	Tractors		.1	2.6	7.7	.3	81.2	18.5	12.1				25.0	2,233.7
68	Agricultural machinery, except tractors			.2	.8		18.4	1.8	.8				2.3	2,521.8
69	Construction machinery, except tractors			.4	4.6				3.9	.1				2,092.5
70	Mining and oilfield machinery													880.7
71	Metalworking machinery	.4	.1	4.9	21.8	.4	.8	13.4	6.4	.6	174.2	2.4	2.4	4,182.9
72	Special industry machinery, n.e.c.	1.9	.2	1.0	3.8	.2	.1	4.2	28.2	.2	6.8	.3	3.3	4,539.9
73	General industrial, including materials handling, equipment			294.4	317.1	.1	.5	9.5	15.7	4.8	48.3	5.4	21.4	4,214.8
74	Office, computing and accounting machinery	125.3	5.9	140.1	569.7	606.0	38.5	26.5	983.5	38.4	14.1	10.7	228.5	4,871.9
75	Service industry machinery	9.6	2.1	26.0	989.0	45.6	44.7	225.0	110.6	199.4	35.2	68.8	140.7	3,722.3
76	Electrical transmission and distribution equipment	88.4	64.1	1,211.9	30.0	2.3		8.3	126.0		7.4	4.1	8.0	3,573.0
77	Communication equipment	5,401.2	184.4	84.1	24.2	8.2	.1	55.3	180.4	4.6	3.3	82.4	142.2	8,833.5
78	Electrical equipment, n.e.c.	31.1		20.2	50.1	.8	3.5	186.9	6.4	58.3	.1	8.1	445.8	943.9
79	Trucks, buses, truck trailers	71.5	4.0	613.2	2,182.0	28.4	21.4	582.7	340.3	62.4	304.4	1.8	50.3	9,830.7
80	Passenger cars	32.8	16.0	41.7	2,728.5	694.4	902.3	412.0	506.9	28.8	722.8	86.8	237.4	18,265.9
81	Aircraft	.9	.8	7.7	30.0	6.5	4.1	1.9	28.0	.7	.8	4.2	28.4	2,573.1
82	Ships and boats				27.5	1.4		2.8	2.1				9.4	1,158.1
83	Railroad equipment													1,054.9
84	Instruments	23.7	15.0	315.3	206.8	280.0	68.1	112.0	442.3	31.3	8.7	48.6	1,748.8	4,785.6
85	Other	8.6	13.0	23.0	99.3	75.7		230.6	48.5	114.3	709.9	481.8	254.2	3,908.1
86	Residential (furnished dwellings)						1,588.1							1,588.1
87	Total new equipment	5,380.2	383.9	4,734.8	6,461.1	2,541.6	3,231.4	2,387.7	2,838.4	1,334.6	1,537.4	1,042.9	2,947.5	32,690.6

NOTE.—An asterisk alongside a value in a cell indicates that at least 85 percent of the value was estimated using distribution procedures classed 1 or 2. (See page 52 of the text.)

Table 2.—Use of New Structures and Equipment by Broad Industry Groups, 1972

(Millions of 1972 dollars)

Commodities	Using Industries	Agriculture	Mining	Construction	Manufacturing			Transportation, communication, and utilities	Trade and services	Total
					Total	Durables	Non-durables			
Capital flow table by I-C commodity group (Producers' value)										
(6) Nonferrous metal ore mining.....	0	0	0	0	0	0	0	108.6	0	108.6
(8) Crude petroleum and natural gas.....	0	58.4	0	0	0	0	0	0	0	58.4
(11) New construction.....	1,328.8	3,838.5	378.0	5,933.7	2,867.2	5,119.5	13,283.2	74,380.2	99,068.5	90,401.1
(15) Ordnance and accessories.....	0	0	0	0	0	0	0	584.6	0	584.6
(17) Miscellaneous textile goods and floor coverings.....	0	0	14.1	20.8	11.2	8.5	5.8	0	0	4.8
(20) Leather and wood products, except containers.....	0	0	0	0	0	0	0	0	0	0
(22) Household furniture.....	0	0	0	0	0	0	0	0	0	0
(23) Other furniture and fixtures.....	4.4	1.0	88.8	455.1	259.4	165.7	04.4	1,743.2	2,387.8	164.2
(27) Chemicals and selected chemical products.....	0	0	0	0	0	0	0	0	0	0
(32) Rubber and miscellaneous plastic products.....	0	0	0	0	0	0	0	0	0	0
(37) Primary iron and steel manufacturing.....	0	0	0	0	0	0	0	0	0	0
(39) Primary nonferrous metals manufacturing.....	0	0	0	0	0	0	0	0	0	0
(40) Metal containers.....	0	0	0	0	0	0	0	0	0	0
(42) Heating, plumbing and fabricated metal products.....	88.0	27.1	0	723.4	135.2	587.3	264.7	120.1	1,195.4	713.2
(43) Other fabricated metal products.....	0	4.2	18.0	503.3	134.8	367.3	1.7	187.2	713.2	0
(48) Engines and turbines.....	27.0	42.2	24.5	232.1	99.9	141.2	1,367.1	12.2	1,906.5	4,281.7
(49) Farm and garden machinery.....	4,291.8	2	52.3	18.0	11.0	7.5	7.0	633.6	4,281.7	18.1
(50) Construction and mining machinery.....	6.4	387.9	2,783.5	03.8	00.5	26.8	6.1	18.1	3,778.6	1,844.5
(51) Materials handling machinery and equipment.....	0	18.7	15.2	1,239.8	707.5	440.8	17.1	278.2	1,844.5	170.5
(52) Metalworking machinery and equipment.....	28.6	3.7	128.1	2,514.1	3,287.6	248.5	21.4	170.5	3,874.4	4,380.8
(53) Special industry machinery and equipment.....	55.4	2.4	7.1	4,163.0	824.9	3,130.7	3.5	48.5	4,380.8	184.1
(54) General industrial machinery and equipment.....	124.6	74.1	97.4	1,507.8	881.9	825.7	264.0	184.1	2,169.7	38.5
(55) Miscellaneous machinery, except electrical.....	0	0	0	0	0	0	0	0	0	0
(56) Office, computing and accounting machines.....	15.3	64.0	30.7	1,318.2	784.2	625.0	382.7	2,498.7	4,328.2	1,022.5
(57) Service industry machines.....	15.3	0	26.0	386.4	188.2	108.6	54.6	1,022.5	2,077.6	3,308.8
(58) Electric transmission and distribution equipment.....	0.3	78.5	54.6	1,742.5	1,147.6	594.9	1,282.4	162.1	3,308.8	1,005.2
(59) Household appliances.....	0	0	0	0	0	0	0	0	0	0
(60) Electric lighting and wiring equipment.....	0	0	0	0	0	0	0	0	0	0
(61) Radio, TV and communication equipment.....	0	1.7	1.6	377.3	249.6	27.8	3,825.6	594.8	4,411.8	14.4
(62) Electronic components and accessories.....	0	0	0	0	0	0	0	0	0	0
(63) Miscellaneous electrical machinery, equipment and supplies.....	0	0	0	0	0	0	0	0	0	0
(64) Motor vehicles and equipment.....	380.4	308.3	1,874.5	2,073.8	1,184.7	819.1	44.1	208.2	4,411.8	16,054.4
(65) Aircraft and parts.....	34.1	5.7	11.7	73.2	44.9	29.3	1,787.2	82.6	1,088.5	8,045.5
(66) Other transportation equipment.....	88.8	48.5	53.9	68.0	94.3	31.6	2,377.7	2,330.1	8,045.5	2,119.8
(67) Professional, scientific, measuring instruments.....	11.1	10.8	77.2	427.1	115.4	811.7	458.9	1,180.0	2,119.8	2,874.6
(68) Optical, photographic and photographic equipment.....	10.1	18.2	31.0	821.1	264.1	855.6	07.9	1,278.5	2,874.6	1,213.7
(69) Miscellaneous manufacturing.....	0	0	0	0	0	0	0	0	0	0
(70) Transportation and warehousing.....	135.6	85.4	62.5	228.8	105.9	130.0	228.2	503.0	1,213.7	2,187.2
(71) Communications, except radio and TV.....	0	0	0	0	0	0	0	0	0	0
(72) Wholesale and retail trade.....	898.8	174.0	884.0	1,782.3	987.2	845.6	1,022.4	4,884.0	9,487.0	887.0
(73) Real estate and rental.....	0	0	0	0	0	0	0	0	0	0
(74) Hotels, lodging, personal and repair services.....	2.7	0	3.8	48.6	21.4	22.3	8.8	134.5	191.5	4.4
(80) Noncomparable impacts.....	2.4	0	0	0	0	0	0	0	0	0
Total.....	7,327.8	5,537.6	6,837.4	27,719.5	14,647.1	13,072.7	32,588.2	104,642.8	186,829.4	
Capital flow table by capital goods category (Purchasers' value)										
New industrial buildings.....	0	182.8	0	4,487.7	2,128.4	2,329.3	0	24.4	4,578.8	12,501.6
New commercial buildings.....	22.5	112.2	284.9	1,387.1	588.3	808.8	658.6	344.0	844.6	844.6
New religious buildings.....	0	0	0	0	0	0	0	0	0	0
New educational buildings.....	0	0	0	0	0	0	0	0	0	0
Hospitals & institutions.....	0	0	0	0	0	0	0	0	0	0
Other buildings.....	8.1	0	0	0	0	0	0	0	0	0
New railroads, telecommunications & electrical utility facilities.....	0	0	0	0	0	0	0	0	0	0
New gas utilities facilities.....	0	0	0	0	0	0	0	0	0	0
New petroleum pipelines.....	0	0	0	0	0	0	0	0	0	0
New farm structures (nonresidential).....	1,432.0	0	0	0	0	0	0	0	1,432.0	2,284.0
Mining exploration, shafts & wells.....	0	2,088.5	0	0	0	0	0	0	2,088.5	841.0
Other new nonresidential structures.....	58.5	188.0	0	158.5	29.6	58.9	22.5	562.6	841.0	10.9
Brokers' commissions on sales of nonresidential structures.....	0	0	0	0	0	0	0	0	0	0
New residential nonfarm housing units.....	0	0	0	0	0	0	0	0	0	0
New hotels and motels.....	0	0	0	0	0	0	0	0	0	0
New dormitories.....	0	0	0	0	0	0	0	0	0	0
New farm housing units.....	0	0	0	0	0	0	0	0	0	0
Brokers' commissions on sales of residential structures.....	0	0	0	0	0	0	0	0	0	0
Total structures.....	1,531.1	2,583.6	364.9	5,943.1	2,967.2	3,118.5	17,388.6	79,684.5	803,755.8	
Furniture & fixtures.....	4.4	1.8	101.0	506.7	219.8	185.0	108.6	2,635.0	2,358.2	2,025.8
Fabricated metal products.....	62.6	32.1	21.4	1,839.6	309.6	1,060.0	468.1	2,832.1	2,025.8	1,685.2
Engines & turbines.....	30.7	43.9	27.2	248.0	95.3	142.7	1,394.3	13.3	1,685.2	2,238.7
Tractors.....	1,894.1	32.8	578.4	29.6	22.8	8.6	8.0	191.4	2,238.7	2,320.2
Agricultural machinery, except tractors.....	2,588.0	0	1.3	0	0	0	0	0	2,588.0	2,392.5
Construction machinery, except tractors.....	3.1	202.5	0	2,582.7	65.3	26.4	2.7	0	2,882.5	829.7
Mining & oilfield machinery.....	0	780.3	149.4	0	0	0	0	0	829.7	0
Metalworking machinery.....	49.8	8.4	174.0	2,714.0	3,438.7	260.3	27.3	221.8	4,122.8	4,539.8
Special industry machinery, n.e.c.....	84.6	1.3	7.8	4,412.3	1,018.6	3,393.7	3.6	49.0	4,539.8	4,214.8
General industrial, including materials handling, equipment.....	144.1	74.2	129.7	3,025.7	1,846.0	1,188.7	414.3	422.6	4,214.8	2,853.9
Office, computing & accounting machinery.....	18.8	70.4	39.6	3,472.5	888.6	2,583.9	430.5	2,138.2	4,371.8	2,793.8
Service industry machinery.....	19.3	0	31.0	464.2	242.0	219.2	0	0	2,793.8	170.2
Electrical transmission & distribution equipment.....	11.0	83.7	68.4	1,888.8	1,238.8	649.0	1,432.0	170.2	3,873.6	6,352.0
Communication equipment.....	0	1.8	1.6	284.2	265.8	18.4	0	0	0	0
Electrical equipment, n.e.c.....	0	0	0	185.1	72.5	122.6	0	0	0	0
Trucks, buses, truck trailers.....	719.9	161.0	1,588.1	898.5	584.5	315.0	2,651.7	3,854.8	9,854.7	10,243.0
Passenger cars.....	889.0	132.3	438.8	1,634.5	914.2	810.6	1,130.2	6,419.1	10,243.0	2,373.1
Aircraft.....	34.6	7.3	20.7	85.6	53.1	32.4	1,506.0	108.3	2,373.1	1,158.1
Ships & boats.....	35.3	34.6	48.5	80.3	23.6	24.7	0	0	1,158.1	0
Railroad equipment.....	0	0	0	0	0	0	0	0	0	0
Instruments.....	15.3	31.4	183.6	1,180.9	420.4	754.5	428.1	3,008.2	4,786.5	1,682.2
Other.....	173.2	0	25.7	145.5	47.0	121.5	88.1	1,428.2	2,428.1	1,585.1
Residential (durable).....	0	0	0	0	0	0	0	0	0	0
Total equipment.....	6,754.4	1,773.9	6,182.5	31,736.1	11,779.9	9,968.2	19,582.2	36,897.9	51,435.8	

series on structures and on producers' durable equipment.

The commodity-by-using industry information in the CFT may be illustrated by referring to a single row and a single column. The row for engines and turbines (I-O 43) shows that the utilities industry (I-O 68) is the largest user, with \$1,233.4 million. The second largest, paper and allied products (I-O 24), uses only \$51.7 million. Many other industries employ smaller amounts of this machinery. The column for the utilities industry (I-O 68) shows that, in addition to engine and turbines, it invests heavily in new construction,

\$8,629.7 million, and electric transmission and distribution equipment, \$1,127.4 million.

Capital flows, 1972

The total of new structures and equipment was \$185.8 billion in 1972; \$103.8 billion was in structures and \$82 billion was in equipment. Structures included \$58.5 billion for new nonfarm residential structures and mobile homes. (Homeownership is treated as a business in the NIPA's.)

The motor vehicles and equipment commodity group (I-O 59) showed the largest equipment sales—\$16.7 billion.

Other large commodity groups were other transportation equipment (I-O 61); radio, TV, and communication equipment (I-O 56); and office, computing, and accounting machines (I-O 51).

The trade and service industries (I-O 69-77) used \$79 billion, or 76.2 percent of new structures; manufacturing used \$6 billion, or 5.8 percent (table 2). The trade and service industries used \$27 billion of new equipment, or 32.9 percent; manufacturing used \$21.7 billion, or 26.5 percent.

Distribution to using industries

The criterion for compiling the CFT

CHART 10

USE TABLE

Industries Commodities	Agriculture	Mining	Construction	Manufacturing	Trade	Transportation	Services	Other	Final Demand (GNP)			
									Persons	Investors	Foreigners	Government
Agriculture												
Mining												
Construction												
Manufacturing												
Trade												
Transportation												
Services												
Other												
Value added (charges against GNP)												

CAPITAL FLOW TABLE¹

Industries Commodities	Agriculture	Mining	Construction	Manufacturing	Trade	Transportation	Services	Other
Construction								
Manufacturing								
Trade								
Transportation								

1. Refers only to gross private domestic fixed investment; excludes change in business inventories.

Table 3.—Procedures Used in Estimating the 1972 Capital Flows

Classification	(Purchaser's values)			
	Structures		Equipment	
	Millions of dollars	Percent	Millions of dollars	Percent
1. Distributed to one industry or based on survey data.....	84,266.8	79	17,128.8	21
2. Distributed mostly to one industry.....	618.9	1	2,867.0	4
3-5. Proxied on the basis of related statistical survey data.....	9,451.3	0	35,530.0	43
6-7. Distributed by other indirect procedures and judgment.....	11,250.4	11	25,480.0	31
Total.....	105,387.4	100	81,025.8	100

was to distribute new structures and equipment to their users rather than their purchasers—a distinction that is especially significant for structures and some equipment, e.g., computers, airplanes, and ships, where leasing is common. Leased structures and equipment were distributed to their users in the CFT, whereas the I-O table shows lease payments going to the real estate and rental (I-O 71) and to business services (I-O 73) industries. The use criterion introduces inconsistencies with the I-O use table for some important items. For instance, leased motor vehicles were allocated to using industries, whereas in the I-O use table motor vehicle lease payments are made to the auto and truck rental industry (I-O 75).⁵ For most commodities, however, the use and purchases criteria yield the same figures, so entries in the CFT and the I-O use table are usually the same.

The estimation of the CFT was done in three stages. First, 606 capital goods items were distributed across the rows to using industries, sometimes with additional commodity detail. Second, total expenditures for structures and for equipment by industry were compiled separately from many sources. Third, the columnar sums of the estimates prepared in stage one were compared to the total expenditures for structures and for equipment prepared in stage two. Both sets of estimates were adjusted

after additional research. Final reconciliation for producers' durable equipment was achieved through an iterative scaling of rows and columns with the row control totals equal to the GPDFI estimates and with the column control totals equal to the adjusted estimates for each industry's total expenditures for producers' durable equipment.⁶

Evaluation of the estimates.—The CFT suffers much more than the I-O use table from gaps in information with which to distribute commodities. Only rarely were survey or other data avail-

able from which to estimate the distribution of commodities by using industry in the CFT. The most reliable estimates are for commodities having only one user and for the commodities that could be disaggregated so there was only one user for each portion. Usually, however, indirect procedures had to be used; that is, commodities were distributed to using industries in proportion to some indicator presumed to be correlated with a commodity's usage, e.g., the number of employees in selected occu-

Table 4.—Reconciliation of Gross Private Domestic Fixed Investment, 1972: NIPA, Input-Output, and Capital Flow

(Millions of dollars purchaser's values)					
	NIPA (published) ¹	Benchmark change	Input-output ²	Net sales of used equipment and structures ³	Capital flow
Producers' durable equipment.....	75,445	3,484	78,909	3,237	82,147
Furniture and fixtures.....	3,280	112	3,392	-34	3,358
Fabricated metal products.....	2,025	495	2,520	5	2,525
Engines and turbines.....	1,487	278	1,765	-1	1,764
Tractors.....	2,589	-280	2,309	-75	2,234
Agricultural machinery, ex. tractors.....	2,454	87	2,541	-3	2,538
Construction machinery.....	2,230	-148	2,082	-90	1,992
Mining and oilfield machinery.....	580	104	684	-14	670
Metallurgical machinery.....	3,186	1,028	4,214	-23	4,191
Special industry machinery, n.e.c.....	4,137	408	4,545	5	4,550
General industrial equipment.....	2,941	151	3,092	35	3,127
Office, computing, and accounting machinery.....	4,528	345	4,873	-42	4,831
Service industry machinery.....	1,708	84	1,792	-83	1,709
Electrical transmission, distribution, and industrial apparatus.....	3,835	50	3,885	-112	3,773
Communication equipment.....	4,585	289	4,874	-1	4,873
Electrical equipment, n.e.c.....	908	34	942	-1	941
Trucks, buses, and trailers.....	18,284	-872	17,412	88	17,500
Passenger cars.....	7,574	-85	7,500	2,757	10,257
Aircraft.....	1,879	44	1,923	305	2,228
Ships and boats.....	1,851	51	1,902	55	1,957
Railroad equipment.....	1,904	-340	1,564	14	1,578
Instruments.....	4,211	587	4,798	-3	4,795
Machinery equipment (other).....	2,359	88	2,447	-31	2,416
Scrap.....	-445	-	-445	445	-
Residential (landlord durables).....	1,041	475	1,516	-	1,516
Private structures.....	108,489	2,894	108,123	-2,225	105,898
Nonresidential.....	42,649	-534	42,015	-5	41,480
Industrial buildings.....	4,478	-	4,478	-	4,478
Commercial buildings.....	13,484	-181	13,303	-	13,122
Religious buildings.....	844	-	844	-	844
Educational buildings.....	888	-	888	-	888
Hospital and institutional buildings.....	3,173	-	3,173	-	3,173
Other buildings.....	914	-	914	-	914
Railroads.....	259	-	259	-	259
Telephone and telegraph.....	2,234	-	2,234	-	2,234
Electric light and power.....	6,902	-	6,902	-	6,902
Gas.....	1,815	-	1,815	-	1,815
Petroleum pipelines.....	284	-	284	-	284
Farm (nonresidential).....	1,432	-	1,432	-	1,432
Mining exploration, shafts, and wells:					
Petroleum and natural gas.....	2,769	-63	2,706	-	2,706
Other.....	388	-5	383	-	383
Other nonresidential structures.....	941	-	941	-	941
Brokers' commissions.....	431	-182	249	-215	11
Net purchases of used structures.....	-180	-88	-268	213	-
Residential.....	65,840	3,159	68,999	-2,230	66,769
1-unit structures.....	27,337	1,875	29,212	-	29,212
2 or more units.....	17,467	789	18,256	-	18,256
Mobile homes.....	4,949	-161	4,788	-	4,788
Additions and alterations.....	7,145	184	7,329	-	7,329
Housekeeping units.....	1,889	-	1,889	-	1,889
Farm residential.....	847	6	853	-	853
Brokers' commissions.....	3,800	403	4,203	-3,518	685
Net purchases of used structures.....	-1,288	83	-1,205	1,184	-
Addenda:					
New construction.....			99,087	-	99,087
Mobile structures.....			4,002	-	4,002
Brokers' commissions.....			4,432	-8,734	-4,302
Net purchases of used structures.....			-1,394	1,299	-95

1. The National Income and Product Accounts of the U.S., 1959-74, Statistical Tables, tables 5.4 and 5.6.
2. These entries represent various aggregations of the 48-order input-output data for 1972.
3. Negative figures represent net purchases of used equipment and structures.

5. Automobiles and trucks on short-term rental were defined as used by the auto and truck rental industry in I-O 76 for both the I-O and CFT tables.

6. These stages are described in the forthcoming BEA publication *New Structures and Equipment by Using Industries, 1974: Detailed Estimates and Methodology*.

pations, water or electrical usage, or truck mileage.

The distributional procedures used for each commodity-by-industry cell were classified to provide an evaluation of the estimates in the CFT and to flag the more reliable ones. Seven classifications were used. The first two classes were: (1) distributed to only one industry or based on nearly contemporary and closely comparable survey data; (2) at least 50 percent distributed to one industry after specific allocations to other industries. The remaining classes were inferior. They included: (a) prorated over outdated or poorly classified survey data, a company's sales pattern, specific types of employment in selected industries, and other statistical survey data assumed to be correlated with a commodity's usage; (b) distributed arbitrarily on the basis of familiarity with the using industries; and (c) adjusted to reconcile with the control totals of investment by industry.

The distributional procedures used for structures are, on the whole, better than those for equipment (table 3). Because many types of structures are used exclusively or predominantly by one industry, 80 percent of the value of structures was distributed using procedures classed 1 or 2. The type of structures going exclusively to petroleum mining (I-O 8), communications, except radio and TV (I-O 66), public utilities (I-O 68), real estate and rental, which includes dwellings (I-O 71), or education and hospitals (I-O 77) accounted for most of the class 1 and 2 allocations. By contrast, most types of equipment are used by more than one industry. Only 24 percent was distrib-

uted using procedures classed 1 or 2; 43 percent was prorated over selected employment patterns or other statistical survey data presumed to be associated with the commodity usage and 33 percent was distributed by other indirect or judgmental methods.

Reconciliation with the NIPA's

The reconciliation of NIPA estimates of GPDEFI with estimates that appear in the I-O table and the CFT is shown in table 4. For this reconciliation, it was necessary to aggregate the I-O and capital flow tables to the categories used in the published NIPA's. The differences (column 2) between the NIPA and I-O estimates are due to preliminary benchmark revisions incorporated into the I-O tables, but not published NIPA estimates.⁷ The difference (column 4) between the GPDEFI column in the I-O table and the column of row totals for the CFT is due to the exclusion of the net sales of used equipment and structures from the CFT.

Comparison with the 1967 CFT

For many reasons, the 1972 CFT is not comparable to that for 1967 published in the September 1975 *SURVEY*. First, the definition of GPDEFI was expanded. The 1967 CFT did not include uranium. Subsequently, the law was changed to allow private establishments to purchase it and to treat it as a capital good; it was included in the capital purchases of utilities (I-O 68) from nonferrous metal ore mining

(I-O 6). The installation of petroleum mining equipment was estimated and redefined as part of the sales of I-O 8. The installation of refrigeration and miscellaneous equipment was included in the sales of I-O 72. Second, the 1972 I-O table changed the treatment of imports. In the 1967 I-O table, imported finished capital goods were allocated directly from foreign trade to GPDEFI. In the 1972 I-O table, if there is a comparable domestic product, the imported commodity is added to the domestic production as part of the total supply allocated to GPDEFI and, in turn, to using industries in the CFT. Therefore, while the 1967 table shows \$657.9 million of directly allocated imports (I-O 80A) for GPDEFI, the 1972 table shows only \$4.6 million of noncomparable imports (I-O 80). Insurance on these imports (I-O 70) is negligible and hence is not listed in the CFT.⁸ Third, industry definitions were changed to reflect changes in the Standard Industrial Classification, redefinitions for certain I-O industries, identification of eating and drinking places (I-O 74) as a new industry, and the combination of new and maintenance construction into one industry (I-O's 11 and 12). Fourth, the 1967 table is in 1967 prices and the 1972 table is in 1972 prices. Finally, there were changes in the procedures used in stage three of the estimation, that is, the reconciliation of the initial estimates of capital flows to using industries with the estimates of total capital expenditures by using industry.

7. The full benchmark revisions of the NIPA's will be published this winter.

8. The computer tape containing the data underlying the capital flow study preserves the detail on comparable imports. These comparable imports were allocated to using industries in the same proportion as the domestic product.